

XXXIV.—*New Evaniidæ and Braconidæ in the British Museum.* By ROWLAND E. TURNER, F.Z.S., F.E.S.

Family Evaniidæ.

Pristaulacus emarginaticeps, sp. n.

♀. Nigra; fusco-pilosula; scapo subtus, femoribus anticis apice, tibiis anticis intermediisque subtus, tarsisque anticis intermediisque brunneis; alis fusco-hyalinis, anticis basi fuscis, fasciaque latissima sub stigmate fusca; capite postice profunde emarginato; cellula cubitali secunda venas recurrentes duas excipiente; unguiculis sex-dentatis.

Long. 13 mm.; terebræ long. 10 mm.

♀. Head massive, very deeply and rather narrowly emarginate posteriorly, shining and almost smooth, the front minutely punctured; clypeus with a small tooth in the middle of the anterior margin. Antennæ stout, the second joint twice as long as broad, the fourth about one-third longer than the third. Prothorax with a small tooth on each side beneath, the thorax somewhat overhanging the anterior truncation; præscutum strongly transversely striated, longitudinally depressed in the middle; scutellum, median segment, and pleuræ very coarsely reticulate; hind coxæ transversely striated; tarsal ungues with a comb of six teeth in addition to the apical point. Abdomen somewhat compressed laterally; the first segment petiolate, broadened at the apex, and longer than the rest of the abdomen; the apical segments sparsely clothed with cinereous pubescence. Second transverse cubital nervure incomplete, indicated by a scar in the middle; second cubital cell receiving both recurrent nervures, the first close to the base, the second just before three-quarters from the base. The dark transverse band from the stigma is very broad, occupying the whole of the second cubital and second discoidal cells, also the apical half of the first cubital and the basal portion of the radial cell, but the extent of the band may be variable.

Hab. Hoabinh, Tonkin, August 1918 (*R. Vitalis de Salvaza*); 1 ♀.

Very distinct in the emargination of the head, the number of teeth in the ungues, and the position of the first recurrent nervure.

Pristaulacus excisus, sp. n.

♀. Very similar to *P. emarginaticeps*, but the head is rather less massive; the posterior emargination is wider and less deep; there is no tooth on the margin of the clypeus; the antennæ are more slender; the wings are less strongly infuscated, especially at the apex, rendering the dark area below the stigma more conspicuous; the second recurrent nervure is received beyond four-fifths from the base of the second cubital cell, and the sculpture of the mesopleuræ is not as coarse. Tarsal unguis with four teeth only.

Hab. Hoabinh, Tonkin, August 1918 (*R. Vitalis de Salvaza*).

Pristaulacus beesoni, sp. n.

♀. Nigra; albido-pilosula; alis hyalinis, venis nigris, anticis macula nigra sub stigmatè, vena cubitali transversa secunda in dimidio inferiore decolorato; scapo brunneo.

♂. Feminae similis.

Long., ♀, 11 mm.; terebræ long. 8 mm.; ♂, 10 mm.

♀. Head smooth and shining, the front microscopically punctured and clothed with short white pubescence. Second antennal joint twice as long as broad, the fourth half as long again as the third, the apical joints slender. Thorax vertically truncate anteriorly, the prothorax with a small spine on each side beneath. Mesonotum and scutellum very coarsely transversely striated, the præscutum longitudinally depressed in the middle; median segment and pleuræ coarsely reticulate. First abdominal segment petiolate, broadened at the apex, and longer than the rest of the abdomen; the apical segments clothed with very delicate white pubescence. Tarsal unguis with four teeth, excluding the apical point. First recurrent nervure received by the first cubital cell a little before the apex, second received before three-fifths from the base of the second cubital cell. The fuscous spot below the stigma is small, not entering the second cubital cell, and scarcely reaching beyond the middle of the first transverse cubital nervure.

Hab. Thanò, Siwalik Hills, United Provinces, India, September 6, 1919 (*C. F. C. Beeson*).

Taken emerging from a Sâl log.

This is very near *P. nigripes*, Kieff., from Sikkim, of

which it may prove to be a subspecies. It differs in the clearer hyaline wings, in the smaller stigmal fuscous mark, and in the position of the recurrent nervures. The latter character does not appear to be very reliable in this genus.

Family Braconidæ.

Subfamily VIPIONINÆ, Viereck.

Genus MONOCOILA, Roman.

Monocoila signata, sp. n.

♀. Fulva; mandibulis apice, antennis, vertice, prosterno lateribus, mesosterno, mesonoto notaulis exceptis, terebra, valvulis, tarsorumque articulo apicali nigris; alis fusco-hyalinis, venis nigris. Long. 5 mm.

♀. Head finely punctured, sparsely on the shining vertex, more closely on the opaque face; a shallow sulcus running from the anterior ocellus to the base of the antennæ; the black colour on the vertex produced anteriorly in the middle so as to include the ocellar region and reaching the base of the antennæ; the head transverse and rather strongly narrowed behind the eyes. Thorax shining, sparsely and very finely punctured; notauli deep and smooth; median segment smooth and shining. Abdomen rugose-reticulate, the sutures crenulate; second tergite with a low median carina from the base, nearly reaching to the suture marking the division between the fused second and third tergites; the apical lobes of the fifth tergite on each side of the apical emargination more strongly rounded than in *pectoralis*, Holmg., and the emargination itself distinctly narrower. Terebra less than half as long as the abdomen. Neuration as in *M. pectoralis*, but the cubital nervure is not curved at the base, in this point resembling *M. secunda*, Szépl.

Hab. Ceres, Cape Province, November 1920 (R. E. Turner);
1 ♀.

The sculpture of the tergites is less coarse than in *pectoralis*.

Monocoila innotata, sp. n.

♀. Rubra; capite nigro, orbitis angustissime genisque rufis; mandibulis flavis, apice nigris, antennis palpisque nigris, prosterno macula parva utrinque tarsisque articulo apicali nigris; alis fuscis, venis nigris. Long. 5 mm.

♀. Similar to *M. signata*, but the face is shining, not opaque, the sculpture of the tergites is more rugose and less reticulate; the suture between the fused second and third tergites is narrower and less distinct, less strongly arched in the middle, and less distinctly crenulate; the emargination of the fifth tergite is shallower, the lobes on each side of it less rounded at the apex. The valvulæ are half as long as the abdomen, but the terebra in the type is exerted and longer than the abdomen.

Hab. Ceres, Cape Province, November 1920 (*R. E. Turner*); 1 ♀.

Subfamily *APHRASTOBRACONINÆ*.

ENDOVIPIO, gen. nov.

Head small; abdomen almost smooth, rather slender, the second tergite as long as broad, with an elongate triangular raised area at the base; cubitus of the fore wing straight, not bent at the base as in *Aphrastobracon*; nervulus strongly antefurcal.

Endovipio ceresensis, sp. n.

♂. Rufo-luteus; antennis, palpis, tarsisque nigris; alis hyalinis, leviter infuscatis, iridescentibus, stigmatè venisque brunneis. Long. 3.5-4 mm.

♂. Antennæ slender, 31-jointed, a little shorter than the whole insect. Head smooth and shining on the vertex and front; face narrow, opaque, finely and very closely punctured; eyes very large. Thorax and median segment smooth and shining; the notauli shallow and smooth, almost obsolete; mesopleural furrows not crenulate. Abdomen smooth and shining, the second tergite with a raised elongate triangular basal area, the basal and lateral sides strongly margined; third tergite with a small raised area at the basal angles. Radius originating close to the middle of the stigma and reaching the apex of the wing; first discoidal cell petiolate; second abscissa of the radius twice as long as the first, second cubital long and narrow, first transverse cubital nervure strongly oblique, second straight and short. Nervulus oblique, antefurcal, separated from the basal nervure by a distance equal to half its own length.

Hab. Ceres, Cape Province, February and March 1921 (*R. E. Turner*); 2 ♂♂.

The genus resembles *Microbracon*, Ashm., except in the venuration, whereas *Aphrastobracon* resembles the more robust and sculptured *Campyloneurus*, Szépl.

This is the first Ethiopian record of the subfamily, the other species being Oriental.

Subfamily *DORYCTINÆ*.

Holcobracon coxalis, sp. n.

♀. Luteo-testacea; flagello, terebra, valvulis, mandibulis apice, tarsisque apice extremo nigris; alis basi pallide flavo-hyalinis, dimidio apicali pallidissime fusco-hyalinis; stigmatibus fusco, basi late flavo; venis basi testaceis, apice fuscis; coxis posticis basi subtus tuberculatis.

Long. 10 mm.; terebræ long. 7 mm.

♀. Antennæ very long and slender, at least 12 mm. in length (the extreme apical joints missing in the only available specimen); face below the antennæ very delicately transversely rugulose; frontal excavation shallow, smooth, and shining. Cheeks about one-third of the length of the eyes, the eyes separated from the margin of the head by a distance equal to half their diameter. Pronotum coarsely punctured; mesonotum smooth and shining; parapsidal furrows deep, finely crenulate. Scutellum with a transverse groove at the base, the groove divided by a longitudinal carina. Dorsal surface of the median segment smooth and shining, divided by a shallow longitudinal groove, margined posteriorly and laterally, the apical slope punctured closely; the sides of the segment more sparsely punctured, with a longitudinal carina. First tergite less than twice as long as broad, finely and closely longitudinally striated; second tergite also finely longitudinally striated, broadly smooth at the apex, an oblique sulcus running from the base at each side, diverging and joining near the apex a coarsely-striated transverse sulcus; the apical tergites smooth and shining. Hind coxæ sparsely punctured, produced triangularly at the base beneath to a small tubercle. Recurrent nervure received by the first cubital cell; second abscissa of the radius less than twice as long as the first.

Hab. Dehra Dun, United Provinces, India, September 1913 (No. 8) (*C. F. C. Beeson*); 1 ♀.

This is distinguishable from typical *Holcobracon* by the structure of the hind coxæ, but I do not consider it sufficiently distinct to deserve generic rank.

Holcobracon fulvus, Cam.

Holcobracon fulvus, Cam. *Spolia Zeylanica*, iii. p. 90 (1905). ♀.

Subsp. *atriceps*, nov.

♀. Differs from the typical form from Ceylon in having the whole of the vertex black, and the longitudinal striæ on the third tergite extend a little further from the base than in the type.

Hab. Dehra Dun, July 1913 (No. 28) (*C. F. C. Beeson*), 1 ♀; Kangra Valley, 4500 ft., August (*G. C. Dudgeon*), 1 ♀.

Cameron subsequently (1910) used the generic name *Holcobracon* a second time for an African genus, which apparently is allied to *Iphiaulax*.

Trichiobracon striolatus, Szépl.

I have given the synonyms of this Bornean species previously (*Ann. & Mag. Nat. Hist.* (8) xx. p. 245, 1917).

Specimens from Dehra Dun (September 1913, No. 13) differ from the typical form in having the sides of the second tergite distinctly punctured; whereas in specimens from Borneo the punctures are more or less confluent, running into longitudinal striæ. It is probable that the Indian specimens represent a distinct subspecies.

Doryctomorpha antipoda, Ashm.

Doryctomorpha antipoda, Ashm. *Entom. News*, xi. p. 630 (1900). ♀.

A female from Wilton's Bush, New Zealand, answers to the description, except in having the antennæ 28-jointed and the terebra only equal in length to the insect, not longer. Ashmead's description reads "Antennæ 2-3-jointed," probably meaning 23. I consider it probable that the New Zealand and Chatham Island forms represent only one species.

Subfamily *BRACONINÆ* (olim *Agathinæ*).

Genus *ORGILUS*, Hal.

The three species of *Orgilus* described here may be separated by the following key:—

- | | |
|---|-------------------------|
| 1. Second tergite transverse, much broader than long,
fourth tergite opaque and coriaceous | <i>O. apostolicus</i> . |
| Second tergite subquadrate, fourth tergite shining,
almost smooth | 2. |

2. First tergite with a luteous apical band; fore wing
 bifasciate *O. bifasciatus*.
 First tergite entirely black; fore wing hyaline..... *O. parvus*.

Orgilus bifasciatus, sp. n.

♀. Nigra; tergito primo fascia transversa apicali lutea; tibiis posticis intermediisque basi albo-annulatis; calcariis posticis albis; tibiis tarsisque anticis, femoribus anticis apice, terebra, flagelloque brunneis; alis hyalinis, fusco bivittatis, stigmatibus venisque fuscis.

Long. 4 mm.; terebræ long. 4 mm.

♀. Head distinctly broader than the thorax, a deep fovea on each side of the clypeus, vertex almost smooth, face minutely punctured. Thorax closely and finely punctured, more finely on the mesopleuræ than on the mesonotum, the sulci on the mesopleuræ finely crenulate. Median segment and hind coxæ closely punctured. First and second tergites rugulose, the second tergite as long as broad; third tergite and base of the fourth finely aciculate. Wings crossed by two pale fuscous bands, which are separated by a hyaline band crossing the wing from the base of the stigma.

Hab. Mossel Bay, Cape Province, April 1921 (*R. E. Turner*); 2 ♀ ♀.

Orgilus parvus, sp. n.

♀. Nigra; flagello, tarsis valvulisque fusco-brunneis; alis hyalinis, venis fuscis; calcariis pallide brunneis.

Long., ♀, 4 mm., terebræ long. 3 mm.; ♂, 3.5 mm.

♀. Head scarcely broader than the thorax, closely and finely punctured, more closely on the face than on the vertex, the usual fovea on each side of the clypeus. Thorax finely and closely punctured, the punctures on the middle of the mesopleuræ very minute, the furrows on the mesopleuræ finely crenulate. Median segment punctured-rugose; the two basal tergites and the extreme base of the third coriaceous, the remaining tergites smooth and shining. Second tergite subquadrate, as long as its basal breadth.

♂. Similar to the female; the antennæ 28-jointed in both sexes, and the palpi black.

Hab. Mossel Bay, Cape Province, December to July (*R. E. Turner*). Also from Ceres, Cape Province.

A good series taken.

Orgilus apostolicus, sp. n.

♂. Niger; tibiis tarsisque anticis, tarsis intermediis, metatarso postico basi, calcariis flagelloque brunneis; tibiis intermediis posticisque basi albo-annulatis; alis hyalinis, venis fuscis.
Long. 5.5 mm.

♂. Head no broader than the thorax, finely and very closely punctured, the foveæ of the clypeus large. Thorax closely punctured, notauli distinctly crenulate posteriorly, propleuræ finely striolate, mesopleuræ finely punctured-rugulose. Median segment rugose-reticulate, with ill-defined longitudinal carinæ near the apex, the apical slope with two well-defined arææ on each side. Three basal tergites rugulose, the basal tergite with a low longitudinal carina not reaching the apex, and with a curved suboblique carina on each side. Second tergite much broader than long, fourth tergite coriaceous. The radial cell is broader than is usual in the genus, the radius being widely curved from the stigma; the nervure dividing the cubital cell from the first discoidal cell is almost colourless. Antennæ 34-jointed.

Hab. Camps Bay, Cape Peninsula, October 1920 (R. E. Turner); 2 ♂♂.

Disophrys dehraensis, sp. n.

♀. Fulva; vertice, antennis, mandibulis apice extremo, abdomine, segmento basali excepto, tarsisque posticis nigris; alis dimidio basali, stigmatè basi maculaque magna substigmatali flavis, dimidio apicali fuscis; venis basi fulvis, apice fuscis.
Long. 11 mm.

♀. Antennæ as long as the whole insect, the scape clothed with short fuscous hairs. Vertex smooth and shining, face very shallowly and minutely punctured, the usual two interantennal lamellæ well developed. Thorax shining, almost smooth, the notauli distinct and smooth. Mesosternum closely punctured; the mesopleuræ with a broad coarsely striated furrow above the mesosternum, and bounded posteriorly by an oblique carina, on each side of which are several short striae. Scutellum finely punctured, with a deep basal groove in which are two carinæ: postscutellum margined in front and posteriorly by strong carinæ, connected in the middle by three short carinæ. Median segment finely punctured on the sides, the spiracles elongate and enclosed in a rounded area; dorsal surface with a well-defined oblique basal area which is divided by a longitudinal

carina, the posterior slope of the segment is margined above by a carina which is connected with the basal area by three strong carinæ on each side; on the posterior slope are two carinæ converging towards the apex, on each side of these carinæ are two well-defined areas. Abdomen smooth and shining. Second cubital cell as long as high at the base, pointed on the radius, the second transverse cubital nervure strongly bent below the middle and emitting the stump of a nervure. The yellow colour of the fore wing extends well beyond the nervulus, and beyond the basal nervure except near the costa. Hind metatarsus longer than the four apical joints of the hind tarsi.

Hab. Dehra Dun, United Provinces, India, September and October 1913 (Nos. 10 & 11).

Bracon (olim *Cremnops*) *desertor*, L.

Ichneumon desertor, Linn. Syst. Nat. ed. 10a, i. p. 563 (1758).

One female received from Dehra Dun is identical with European specimens (June 1913, No. 1).

Subfamily *HELCONINÆ*.

Pseudohelcon distanti, sp. n.

♀. Lutea; mandibulis apice, area inter ocellos, antennis valvulisque nigris; tarsis posticis, tibiisque posticis dimidio apicali infuscatis; alis pallidissime flavo-hyalinis, venis flavis; stigmatibus dimidio apicali, vena basali, nervulo radiique abscissa prima fuscis.

Long. 10 mm., terebræ long. 9 mm.

♀. Eyes prominent and fairly large; the head broad and massive, somewhat swollen behind the eyes, the hind margin broadly and rather shallowly emarginate; vertex shining, very minutely punctured, a space behind the ocelli slightly concave; front and face opaque and very delicately rugulose. Third and fourth antennal joints equal, not quite four times as long as thick; antennæ a little more than two-thirds of the length of the insect. Thorax finely punctured, the notauli deep and finely crenulate. Median segment and first tergite coarsely rugulose, the base of the second tergite more finely rugulose, the remaining tergites smooth and shining. First tergite much longer than broad, second broader than long. Fore tarsi longer than the tibiæ, but less than half as long again; hind tibiæ less than twice as

long as the hind femora ; hind metatarsus not quite as long as the four following joints combined. First and second abscissæ of the radius about equal, second cubital cell fully twice as long on the cubitus as on the radius, the latter originating nearer to the apex of the stigma than to the base. Recurrent nervure received distinctly before the first transverse cubital nervure ; nervulus interstitial ; first discoidal cell sessile ; anal cell with two transverse nervures.

Hab. Pretoria (*W. L. Distant*).

This species undoubtedly belongs to Szépligeti's genus *Pseudohelcon*, though the legs are somewhat less elongate than indicated in the description of the genus, with different proportion of the joints ; the eyes are not small, and the position of the recurrent nervure is different.

Aspicalpus hudsoni, sp. n.

♂. Niger ; pedibus flavo-ferrugineis, coxis posticis, tibiis posticis apice, tarsorumque articulo apicali nigris ; alis hyalinis, venis nigris.

Long. 10 mm.

♂. Head margined posteriorly, not narrowed behind the eyes ; vertex shining, finely and rather sparsely punctured ; face opaque, finely rugose ; clypeus shining, punctured, very broadly rounded at the apex, almost transverse. No frontal excavation. Antennæ very long, measuring 11 mm., 46-jointed. Cheeks about as long as the scape. Mesonotum and scutellum finely punctured, notauli well developed. Median segment rugose, the extreme base smooth, with a low, longitudinal, median carina ; the segment margined posteriorly, with an ill-defined area on each side at the apex. Abdomen slender, smooth, and shining, the junction of the abdomen with the median segment situated just above the hind coxæ. Calcar of the hind tibiæ short, hind coxæ very closely punctured, hind metatarsus as long as the four following joints combined. Radius not quite reaching the apex of the wing, originating nearer to the apex of the stigma than to the base ; first abscissa of the radius fully half as long as the second, first discoidal cell sessile, nervulus post-furcal, but not strongly so, anal cell with one transverse nervure ; second cubital cell distinctly longer on the cubitus than on the radius, the second transverse cubital nervure forming a right angle with the cubitus.

Hab. Kinloch, Lake Wakatipu, New Zealand, January 1921 (*G. V. Hudson*).

Allied to *A. penetrator*, Sm. (*Rhogas* ρ .), which I have previously placed in this genus. These two species are not typical *Aspicolpus*, the nervulus in both being distinctly postfurcal; but they may be left in the genus, at least provisionally.

Subfamily *DIOSPILINÆ*.

Diospilus antipodum, sp. n.

♀. Nigra; mandibulis basi, scapo subtus, prothorace, tegulis, mesopleuris macula sub alis, pedibusque testaceis; tibiis posticis dimidio apicali tarsisque posticis infuscatis; alis hyalinis, venis nigris.

♂. Feminae similis; prothorace pedibusque posticis nigris; trochanteribus posticis femoribusque basi flavo-testaceis.

Long., ♀, 4.5 mm., terebræ long. 2 mm.; ♂, 4 mm.

♀. Clypeus transverse at the apex, the central portion raised, with a large round fovea on each side, head margined posteriorly, shining, minutely and sparsely punctured, the vertex almost smooth. Antennæ 29-jointed, scape less than twice as long as its apical breadth. Thorax rather closely punctured, more coarsely on the pleuræ than on the dorsal surface, the mesopleuræ with a smooth shining space in the middle. Scutellum convex, smooth in the middle; median segment rounded, rugosely punctured; abdomen smooth and shining, the basal segment longer than its apical breadth, strongly margined laterally and smooth. Neuration normal, not differing from European species, except in the radial nervure, which reaches the apex of the wing.

♂. Antennæ 28-jointed; first tergite slender, almost subpetiolate.

Hab. Wiltons Bush, New Zealand (*G. V. Hudson*).

Subfamily *EUPHORINÆ*.

Streblocera insperata, sp. n.

♀. Ochracea; flagello apice, mesonoto lobis lateralibus loboque mediano antice, segmento mediano, petiolo, tergitoque quarto nigris; alis hyalinis, stigmatibusque pallidis.

Long. 4 mm.

♀. Antennæ 20-jointed, the scape long and stout, measuring 1 millimetre in length, smooth and without hairs, subtuberculate beneath at one-third from the base, slightly

curved. Flagellum about twice as long as the scape, the ninth joint produced strongly at the outer apical angle. Head smooth and shining; the front minutely punctured at the sides, with a shallow longitudinal sulcus which does not reach the anterior ocellus; the scape inserted on a large round prominence; face subopaque. Thorax shining, finely and distantly punctured; pronotum crenulate; notauli smooth, mesopleuræ smooth in the middle; a deep transverse groove at the base of the scutellum in which are several longitudinal striæ. Median segment rugose, with lateral marginal carinæ, the apical slope coarsely reticulate. Abdomen smooth and shining, the petiole with delicate longitudinal striæ which do not reach the apex. Valvulæ very short, considerably shorter than the first tergite; femora and tibiæ long, tarsi rather short. Radius originating a little beyond the middle of the stigma; the costal margin of the radial cell half as long as the stigma.

Hab. Ceres, Cape Province, February and March 1921 (R. E. Turner); 2 ♀ ♀.

This is not a typical *Streblocera*, the scape being smooth and rather differently shaped; but I think it may be retained in the genus.

XXXV.—*Travassosius rufus*, *gen. et sp. n.*: a Nematode (Trichostrongylidæ) parasitic in the Stomach of the Norwegian Beaver. By M. KHALIL, Ph.D. (Lond.), M.D. (Brux.), D.P.H., Hon. Parasitologist to the Zoological Society of London*.

Material.—Numerous examples of this nematode were found in the stomach of a beaver—“*Castor fiber*”—from Norway, which died at the Zoological Society's Gardens, London. The animal died on the day following its admission to the menagerie. About two weeks later a second beaver, brought from the same locality, also died. In the latter only a few specimens of the same nematode were found. In both animals the cæcum harboured numerous specimens of *Cladorchis* (*Stichorchis*) *subtriquetrus*.

Shape of Body.—In the fresh state the parasites were

* From the Helminthological Department, London School of Tropical Medicine.